

### **DETAILED ACTION**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Rod Turner on 11/04/2009.

The application has been amended as follows:

1. An arrangement for testing a radio device comprising:

a waveguide closed at both of its ends; and

comprising a holder arranged to hold the radio device partly inside the waveguide in such a manner that at least a portion of the radiating part of the radio device remains outside the waveguide, the at least a portion of the radiating part of the radio device remaining outside the waveguide being entirely inside the holder, wherein the waveguide comprises:

one or more ridges extending along a longitudinal axis of the waveguide, the end of at least one ridge facing the holder being bevelled; and

one coupling inside the waveguide for transmission and reception of a radio-frequency signal by the use of a wideband mode of propagation;

wherein the end of the waveguide on the side of the holder comprises one or more pegs made from a conductive substance and fastened to the inner surface of the waveguide.

2. (Cancelled)

Art Unit: 2618

3. An arrangement as claimed in claim 1, wherein the pegs are in contact with the waveguide only at their ends.

17. A method of testing a radio device, wherein the radio device to be tested is mounted by means of a holder such that the radio device is held partly inside a waveguide closed at both of its ends, the method comprising:

generating a wideband mode of propagation in the waveguide by means of at least one ridge extending along a longitudinal axis of the waveguide, the end of the at least one ridge facing the holder being bevelled; and

transmitting and receiving radio-frequency signals by using the wideband mode of propagation between the radio device and a coupling installed in the waveguide, at least a portion of the radiating part of the radio device remaining outside the waveguide, the at least a portion of the radiating part of the radio device remaining outside the waveguide being entirely inside the holder;

wherein one or more pegs made from a conductive material are fastened to the inner surface of the waveguide at the end of the waveguide on the side of the holder.

22. (Cancelled)

***Allowable Subject Matter***

The following is an examiner's statement of reasons for allowance:

Consider claim 1, the best prior art of record made during the examination of the application, Mattson et al. (US PAT 6,188,365) herein Mattson in view of Kuroda (US PAT 3,383,630) fail to specifically teach, suggest, or disclose an arrangement for testing a radio

Art Unit: 2618

device comprising: a waveguide closed at both of its ends; and comprising a holder arranged to hold the radio device partly inside the waveguide in such a manner that at least a portion of the radiating part of the radio device remains outside the waveguide, the at least a portion of the radiating part of the radio device remaining outside the waveguide being entirely inside the holder, wherein the waveguide comprises: one or more ridges extending along a longitudinal axis of the waveguide, the end of at least one ridge facing the holder being beveled; and one coupling inside the waveguide for transmission and reception of a radio-frequency signal by the use of a wideband mode of propagation; wherein the end of the waveguide on the side of the holder comprises one or more pegs made from a conductive substance and fastened to the inner surface of the waveguide.

Mattson teach a device for testing a transmitter and/or receiver of electromagnetic waves includes a hollow metal body, dimensioned to function as a waveguide, including a hole for receiving a test antenna and a hole for receiving the receiver to be tested, a test antenna inserted into the hole, and a signal generating device connected to the test antenna (abstract). A metal box 1, with a rectangular cross-section is used as a waveguide. Both ends of the waveguide 1 are closed, so that it is a closed box with a minimum of RF leakage (column 3 lines 30-36). A measuring probe 3 is inserted into a hole 5 in the waveguide 1 from the top. A distance of a quarter of a wavelength into the waveguide 1, on the same side as the measurement antenna there is a hole 11 adapted to receiver an antenna 13 that is to be tested (column 3 lines 37-46).

Kuroda teach a standard waveguide is attached perpendicularly to a device at the portion of conjunction (Figure 8 & 9). With this device, the electromagnetic wave entering at a terminal 10 is transmitted to both terminals 11 and 12 in phase, but not to another terminal 13 because of

Art Unit: 2618

their electric-field vectors are perpendicular to each other (column 2 lines 21-30 and column 2 lines 41-47).

These teachings either alone or in combination fail to teach the invention, therefore claim 1 is considered novel and non-obvious over the prior art and therefore claim 1 is allowed.

Claims 3-16 depend upon allowable claim 1, therefore claims 3-16 are also allowed for the reasons explained above in view of Mattson and Kuroda.

Consider claim 17, the best prior art of record made during the examination of the application, Mattson et al. (US PAT 6,188,365) herein Mattson in view of Kuroda (US PAT 3,383,630) fail to specifically teach, suggest, or disclose a method of testing a radio device, wherein the radio device to be tested is mounted by means of a holder such that the radio device is held partly inside a waveguide closed at both of its ends, the method comprising: generating a wideband mode of propagation in the waveguide by means of at least one ridge extending along a longitudinal axis of the waveguide, the end of the at least one ridge facing the holder being beveled; and transmitting and receiving radio-frequency signals by using the wideband mode of propagation between the radio device and a coupling installed in the waveguide, at least a portion of the radiating part of the radio device remaining outside the waveguide, the at least a portion of the radiating part of the radio device remaining outside the waveguide being entirely inside the holder; wherein one or more pegs made from a conductive material are fastened to the inner surface of the waveguide at the end of the waveguide on the side of the holder.

The teachings of Mattson and Kuroda either alone or in combination fail to teach the invention. Therefore, for similar reasons explained above in view of claim 1, claim 17 is considered novel and non-obvious and is therefore allowed.

Art Unit: 2618

Claims 18-21 and 23 depend upon allowable claim 17, therefore these claims are also allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents  
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Alexandria, VA 22313-1450

**Hand-delivered responses** should be brought to

Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to April Guzman Gonzales whose telephone number is 571-270-1101. The examiner can normally be reached on Monday - Friday, 10:00 a.m. - 6:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2618

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/April Guzman Gonzales/  
Examiner, Art Unit 2618